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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,802	12/02/2003	Michael Joseph Washburn	139682UL (15276US01)	3317

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EXAMINER	
BODDIE, WILLIAM	

ART UNIT	PAPER NUMBER
2629	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/725,802	WASHBURN, MICHAEL JOSEPH	
	Examiner	Art Unit	
	William L. Boddie	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 September 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. In an amendment dated, August 17th, 2007 the Applicant amended claim 3 and traversed the rejections of claim 1-22. Currently claims 1-22 are pending. Applicant is advised that this application has been re-docketed to a different Examiner.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the embodiment comprising a trackball and a wheel on a mousing device as claimed in claims 4 and 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Response to Arguments

3. Applicant's arguments filed August 17th, 2007 have been fully considered but they are not persuasive.

4. On page 7 of the remarks the Applicant argues that Gaughan does not disclose a trackball controlling more than a cursor on the screen. The Applicant argues that the x,y coordinate information is used to move a cursor, not trigger functions or control the machine.

The Examiner respectfully disagrees. While it could be argued that cursor control of an imaging system is sufficient to satisfy the limitations regarding adjusting the image system, this is not the focus of the Examiner's argument. Instead, the Applicant is pointed to figure 6 of Gaughan. This figure is important for the present argument due to the arrows, which show the full range of motions that are capable and are registered by the trackball of Gaughan. The X and Y coordinate movement are clearly visible as the curved arrows. Also shown is Z-axis motion in pressing the trackball in a downward direction. Regardless of dependent claims that the Applicant has crafted, pressing down on the trackball in Gaughan realizes a downward motion of the trackball to depress a switch. It is this movement of the trackball that is translated into a command for executing a function of the display imaging system. This operation is fully detailed by Gaughan at column 4, line 40 through column 5, line 11. For the above reasons the disclosure by Gaughan is seen as sufficient to satisfy the current

claim limitations requiring that movement of the trackball be translated into a command for executing a setting or function.

5. The Applicant, at the bottom of page 7 of the remarks, argues that clicking of the trackball is a separate action from the motion of the trackball itself.

The Examiner must disagree. Independent claims are just that independent. Limitations from dependent claims are not read into the limitations of their parent independent claims, to do so would remove any need for dependent claims. Regardless the Z-axis movement of Gaughan's trackball is by definition movement, and as shown above satisfies the allegedly missing limitations.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-3, 5-9, 11-19 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funda et al. (US 5,417,210) in view of Gaughan et al. (US 5,589,893).

With respect to claim 1, Funda discloses, a method for remotely operating a medical diagnostic imaging system, said method comprising a trackball device (col. 9, lines 65-68).

Funda does not expressly disclose the trackball remotely controls the system.

Gaughan discloses, a method for remotely operating an imaging system (fig. 1), comprising;

moving a trackball in a handheld trackball device (see fig. 6);

translating movement of said trackball to a command for execution at said medical diagnostic imaging system (fig. 5);

transmitting said command based on movement of said trackball to said display imaging system from said handheld trackball device (figs. 1-2); and

executing said command at said display imaging system, wherein said command comprises adjusting a setting or function of said display imaging system based on said command (col. 4, line 40 – col. 5, line 11).

Funda and Gaughan are analogous art because they are from the same field of endeavor namely cursor control of imaging devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to use Gaughan's remote trackball in Funda's system for the benefit of allowing the user to move freely while controlling the system.

With respect to claim 2, Funda and Gaughan disclose, the method of claim 1 (see above).

Funda, when combined with Gaughan, discloses, wherein said transmitting step further comprises wireless transmission of said command to said imaging system (Gaughan; col. 2, lines 10-13).

With respect to claim 3, Funda and Gaughan disclose, the method of claim 1 (see above).

Funda, when combined with Gaughan, discloses, transmitting a command based on clicking said trackball (Gaughan; col. 4, lines 60-64).

With respect to claim 5, Funda and Gaughan disclose, the method of claim 1 (see above).

Funda further discloses, controlling said imaging system using a voice command (267 in fig. 3).

With respect to claim 6, Funda and Gaughan disclose, the method of claim 1 (see above).

Funda, when combined with Gaughan, further discloses, pressing a button on said handheld trackball device to trigger an imaging system command (Gaughan; col. 5, lines 5-8).

With respect to claim 7, Funda discloses, a handheld trackball device for controlling a medical diagnostic imaging system (col. 9, lines 65-68).

Funda does not expressly disclose that the trackball remotely controls the system.

Gaughan discloses, a handheld trackball device for controlling a display imaging system (figs. 1-2) said device comprising:

a trackball for controlling said display imaging system based on motion of said trackball (col. 4, line 40 – col. 5, line 11);

a transmitter for transmitting a command to said display imaging system based on motion of said trackball (col. 4, lines 60-64), said command generated through

translation of said motion of said trackball to a command for execution at said display imaging system (fig. 5); and

a housing for holding said trackball (70 in fig. 6) and said transmitter (40 in fig. 2).

At the time of the invention it would have been obvious to one of ordinary skill in the art to use Gaughan's remote trackball in Funda's system for the benefit of allowing the user to move freely while controlling the system.

With respect to claim 8, Funda and Gaughan disclose, the device of claim 7 (see above).

Funda, when combined with Gaughan, further discloses, a button for controlling an imaging system function (Gaughan; 48 in fig. 2).

With respect to claim 9, Funda and Gaughan disclose, the device of claim 7 (see above).

Funda further discloses, wherein said trackball device works with voice commands to control said imaging system (267 in fig. 1).

With respect to claim 11, Funda and Gaughan disclose, the device of claim 7 (see above).

Funda further discloses, wherein said device works with a voice command (267 in fig. 1).

With respect to claim 12, Funda and Gaughan disclose, the device of claim 7 (see above).

Funda, when combined with Gaughan, discloses, wherein said handheld trackball device comprises a wireless handheld trackball device (Gaughan; col. 2, lines 10-13).

With respect to claim 13, Funda discloses, a remote mousing device for operating a medical diagnostic imaging system (col. 9, lines 65-68).

Gaughan discloses, a remote mousing device (fig. 2) for operating a display imaging system (fig. 1), comprising:

a moveable portion (42 in fig. 6) for operating said display imaging system based on motion of said moveable portion (fig. 5); and

a transmitter for transmitting a command to said display imaging system based on said moveable portion (col. 4, lines 60-64), said command generated through translation of motion of said moveable portion to a command for execution at said display imaging system(col. 4, line 40 – col. 5, line 11).

At the time of the invention it would have been obvious to one of ordinary skill in the art to use Gaughan's remote trackball in Funda's system for the benefit of allowing the user to move freely while controlling the system.

With respect to claim 14, Funda and Gaughan disclose, the mousing device of claim 13 (see above).

Funda further discloses, wherein said moveable portion comprises a trackball (col. 9, lines 65-68).

With respect to claim 15, Funda and Gaughan disclose, the mousing device of claim 13 (see above).

Funda, when combined with Gaughan, discloses, an additional input receptor (48 in fig. 2).

With respect to claim 16, Funda and Gaughan disclose, the mousing device of claim 15 (see above).

Funda, when combined with Gaughan, discloses, an additional input receptor is a button (48 in fig. 2).

With respect to claim 17, Funda and Gaughan disclose, the mousing device of claim 13 (see above).

Funda further discloses, wherein said mousing device works with a voice command (267 in fig. 1).

With respect to claim 13, Funda and Gaughan disclose, the mousing device of claim 13 (see above).

Funda, when combined with Gaughan, discloses, wherein said mousing device comprises a wireless mousing device (Gaughan; col. 2, lines 10-13).

With respect to claim 19, Funda and Gaughan disclose, the mousing device of claim 13 (see above).

Funda, when combined with Gaughan, discloses, wherein said mousing device comprises a handheld mousing device (Gaughan; clear from fig. 2).

With respect to claims 21-22, Funda and Gaughan disclose, the mousing device of claim 13 (see above).

Funda further discloses, wherein said mousing device is integrated with an imaging instrument (col. 6, lines 32-59; col. 9, lines 65-68).

8. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funda et al. (US 5,417,210) in view of Gaughan et al. (US 5,589,893) and further in view of Chang (US 5,298,919).

With respect to claims 4 and 10, Funda and Gaughan disclose, the method of claims 1 and 7 (see above).

Neither Funda nor Gaughan expressly disclose, wherein said trackball comprises a wheel on a mousing device.

Chang, discloses mounting a wheel (18 in fig. 1) on a handheld device (10 in fig. 1) for inputting additional movement to a display system.

Chang, Funda and Gaughan are analogous art because they are all from the same field of endeavor namely cursor control of imaging devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the wheel of Chang on the trackball device of Funda and Gaughan for the clear benefit of allowing additional movement to be inputted into the system.

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Funda et al. (US 5,417,210) in view of Gaughan et al. (US 5,589,893) and further in view of Holmes (US 6,222,526).

With respect to claim 20, Funda and Gaughan disclose, the mousing device of claim 13 (see above).

Neither Funda nor Gaughan expressly disclose a fastener.

Holmes discloses, a mousing device (12 in fig. 7) comprising a fastener (54 in fig. 7) for affixing said mousing device to an operator (clear from fig. 7).

Holmes, Funda and Gaughan are analogous art because they are all from the same field of endeavor namely cursor control of imaging devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the fastener of Holmes on the trackball device of Funda and Gaughan for the clear benefit of fastening the input device to the operator.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wood et al. (US 7,072,501) discloses a medical diagnostic imaging system wherein movement of a mouse alters the brightness and contrast levels of a displayed image (col. 9, lines 14-21).

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William L. Boddie whose telephone number is (571)

272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Wlb
10/15/07

Sumati Lefkowitz

SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER